

CLAIMS

What Is Claimed Is:

1. An isolated polynucleotide comprising a nucleic acid sequence selected from the group consisting of:

- (a) a polynucleotide encoding amino acids 1-427 of SEQ ID NO:2
- (b) a polynucleotide encoding amino acids 1-407 of SEQ ID NO:2;
- (c) a polynucleotide encoding amino acids 2-427 of SEQ ID NO:2;
- (d) a polynucleotide encoding amino acids 198-381 of SEQ ID NO:2;
- (e) a polynucleotide encoding amino acids 382-407 of SEQ ID NO:2;
- (f) a polynucleotide encoding amino acids 408-427 of SEQ ID NO:2;
- (g) a polynucleotide encoding amino acids 306-427 of SEQ ID NO:2;
- (h) a polynucleotide encoding the amino acid sequence encoded by the cDNA contained in ATCC Deposit No. 97242;
- (i) a polynucleotide encoding at least 30 contiguous amino acids of SEQ ID NO:2 or the cDNA clone contained in ATCC Deposit No. 97242;
- (j) a polynucleotide encoding at least 50 contiguous amino acids of SEQ ID NO:2 or the cDNA clone contained in ATCC Deposit No. 97242;
- (k) a polynucleotide of at least 30 contiguous nucleotides of SEQ ID NO:1 or the coding strand of the cDNA clone contained in ATCC Deposit No. 97242;

(l) a polynucleotide of at least 40 contiguous nucleotides of SEQ ID NO:1 or the coding strand of the cDNA clone contained in ATCC Deposit No. 97242;

(m) a polynucleotide of at least 50 contiguous nucleotides of SEQ ID NO:1 or the coding strand of the cDNA clone contained in ATCC Deposit No. 97242;

(n) a polynucleotide of at least 60 contiguous nucleotides of SEQ ID NO:1 or the coding strand of the cDNA clone contained in ATCC Deposit No. 97242; and

(o) the complement of (a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (l), or (m).

2. The isolated polynucleotide of claim 1, wherein said polynucleotide is (a).
3. The isolated polynucleotide of claim 1, wherein said polynucleotide is (b).
4. The isolated polynucleotide of claim 1, wherein said polynucleotide is (c).
5. The isolated polynucleotide of claim 1, wherein said polynucleotide is (d).
6. The isolated polynucleotide of claim 1, wherein said polynucleotide is (e).
7. The isolated polynucleotide of claim 1, wherein said polynucleotide is (f).
8. The isolated polynucleotide of claim 1, wherein said polynucleotide is (g).
9. The isolated polynucleotide of claim 1, wherein said polynucleotide is (h).
10. The isolated polynucleotide of claim 1, wherein said polynucleotide is (i).
11. The isolated polynucleotide of claim 1, wherein said polynucleotide is (j).
12. The isolated polynucleotide of claim 1, wherein said polynucleotide is (k).

13. The isolated polynucleotide of claim 1, wherein said polynucleotide is (l).
14. The isolated polynucleotide of claim 1, wherein said polynucleotide is (m).
15. The isolated polynucleotide of claim 1, wherein said polynucleotide is (n).
16. The isolated polynucleotide of claim 1, wherein said polynucleotide is (o).
17. The isolated polynucleotide of claim 1 fused to a heterologous polynucleotide.
18. The isolated polynucleotide of claim 17, wherein the heterologous polynucleotide encodes for a heterologous polypeptide.
19. The isolated polynucleotide of claim 1, wherein the polynucleotide is double stranded.
20. A recombinant vector comprising the polynucleotide of claim 1.
21. The vector of claim 20 wherein the vector is a viral vector.
22. The vector of claim 21 wherein the viral vector is a retroviral vector.
23. A host cell comprising the polynucleotide of claim 1.
24. A host cell comprising the polynucleotide of claim 1, wherein said polynucleotide is operatively associated with a heterologous regulatory sequence.
25. An isolated polynucleotide that hybridizes to SEQ ID NO:1 or the cDNA clone contained in ATCC Deposit No. 97272, wherein said hybridization takes place under stringent hybridization conditions.
26. A method of producing a protein comprising:

(a) culturing the host cell of claim 23 under conditions such that said protein is expressed; and

(b) recovering said protein.

27. An antibody that bind specifically to a polypeptide encoded by a polynucleotide of claim 1.

28. A method of gene therapy for preventing, treating, or ameliorating an infectious disease comprising administering to a mammal a polynucleotide of claim 1.

29. The method of claim 28 wherein the infectious disease is caused by a virus.

30. The method of claim 29 wherein the virus is HIV.

31. The method of claim 28 wherein the polynucleotide is administered using a viral vector.

32. The method of claim 28 wherein the polynucleotide is administered using a retroviral vector.

33. A method of gene therapy for preventing, treating, or ameliorating an infectious disease comprising:

(a) engineering cells from a patient with a polypeptide polynucleotide of claim 1 ex vivo; and

(b) returning the engineered cells to the patient.

34. The method of claim 32 wherein the infectious disease is caused by a virus.

35. The method of claim 33 wherein the virus is HIV.

36. The method of claim 31 wherein the polynucleotide is administered using a retroviral vector.